The purpose of the labor descritions it to allow evaluation across vendors. The vendor shall identify its labor category that most closely approximates the following descriptions.

Vendor Title	Labor Category	Description of Functional Duties	Labor Category Requirements/Qualifications
	Telecomm Technician	Installs, tests, troubleshoots, programs, maintains, and repairs data communications systems. Monitors and responds to telecommunications hardware and software problems utilizing hardware and software testing tools and techniques. Analyzes system failures and other unusual system occurrences to isolate the source of the problem and determine whether the failure is caused by software, hardware, or other factors. May assist with installation of telecommunications hardware and associated software. May provide LAN server support. Maintains manual and/or computerized network records and reports. Responsible for on-the-job training of junior technicians.	Requires strong knowledge of PC/LAN hardware/software, in a multi-protocol telecommunications environment. The Telecommunications Technician assigned will generally have a Bachelors Degree and five years of Information Technology (IT) experience with hands-on experience and demonstrated ability to provide Telecommunications support of complex tasks similar to that ordered.
	Installation Manager	Operates and maintains technician workforce. May be required to establish priorities. Performs on-site testing, maintenance, installation and training. Have task leader responsibilities. Duties: Organizes and directs network installations on site surveys. Assesses and documents current site network configurations. Directs and leads preparation of engineering plans and site installation technical design packages. Develops installation schedules. Mobilizes network installation team. Directs and leads preparation of drawings documenting configuration changes at each site. Prepares site installation and test reports. Coordinates post-installation operations and maintenance support.	Will generally have at least 5 years of specialized experience, including supervision of installation technicians; analysis, design, and installation of local and wide area networks; and analysis and installation of communications systems. Familiar with engineering documentation, network configurations and topologies, X.25, TCP/IP, frame relay, bridges, and routers. General experience includes increasing responsibilities in technical management.
	Network Engineer	Troubleshoots and provides solutions for technical problems. Provides product development consulting and system integration to develop strategic applications into internal and external products. Reviews requirements and capabilities of software/hardware needs, and researches and studies IP base network architecture, multimedia protocols, and service support. Coordinates requirement input, develops strategies, and provides technical direction to project or functional manager. Develops specifications, detailed project plans, time estimates, and resource allocation. Authors technical white papers and partner manuals by reviewing industry technologies, coordinating effective documentation, researching effective technologies, and assessing industry standards. Interacts within the company and with clients to understand IT products and provides accurate descriptions of services and technologies. Assists in defining network requirements. Provides training to subordinate personnel.	Will generally have three years of experience in multiple operating systems, system integration, and IP base network architecture. Requires a complete understanding of multiple computer operating systems and knowledge of the capabilities of a wide variety of software and hardware. Proficiency in Microsoft Word, Excel, and PowerPoint, and ability to operate in a fast-paced environment.
	Quality Assurance Manager	Provides management and supervision of the Quality Assurance Analysts as well as the processes and procedures used to ensure accuracy and completeness of all final deliverables. Develops software quality assurance plans. Conducts formal and informal reviews at predetermined points throughout the development life cycle.	Will generally have eight (8) years of technical management experience directing and supervising the design and development of test plans and programs for execution of unit, functional, and system acceptance testing. Must be able to determine the resources required for quality control. Must be able to maintain the level of quality throughout the system life cycle.
	Programmer Database Analyst	Develops database structure and functionality based on requirements defined by the system analyst. Prepares user-friendly applications and interfaces, written operational instructions, and provides verbal briefings on attributes and application of the tool delivered. Performs analysis, design, programming, documentation, and implementation of applications. Participates in all phases of software development with emphasis on the analysis, coding, testing, documentation, and acceptance phases. Designs and prepares technical reports and documentation to record results. Briefs management on the status, schedule, and problems associated with the on-going project.	Will generally have two years experience in database design and production. Requires knowledge of management information systems and related concepts for effective development, integration, and deployment of software. Requires familiarity with commercial database platforms such as Oracle, Microsoft Access, MySQL, or Microsoft SQL Server 7 and with developing views, stored procedures, tables, queries, scripts, modules, macros, and other entities within the database environment. May be required to serve as task leader on a moderately complex combination of one or more delivery orders.

Vendor Title	Labor Category	Description of Functional Duties	Labor Category Requirements/Qualifications
	System Architect	Works independently designing and developing new IT products or major enhancements to existing IT systems. May lead a large development team in design of highly complex IT systems. Acts as highest level technical expert, addressing problems of systems integration, compatibility, and multiple platforms. Performs feasibility analysis on potential future projects to management. Formulates/defines specs for complex software programming applications or modifies/maintains complex existing applications. Responsible for overall program design, coding, testing, debugging and documentation. Usually responsible for applications dealing with the overall operating system, such as sophisticated file maintenance routines, large telecommunications networks, computer accounting and advanced mathematical/scientific software packages. Also has duties instructing, directing and checking the work of other systems programming personnel. Responsible for QA review and evaluation of new and existing software products.	The Systems Architect assigned will generally have a Bachelors Degree and 3-10 years of progressive hands-on software experience and demonstrated ability to provide design support of complex tasks. Preferably 8-10 years of IT experience related to design and development of complex distributed systems. Has full technical knowledge of all phases of software systems programming applications.
	Operations manager	Manages computer operations. Ensures production schedules are met. Ensures computer system resources are used effectively. Coordinates the resolution of production-related problems. Ensures proper relationships are established between customers, teaming partners, and vendors to facilitate the delivery of information technology services. Supervises computer operations staff. May provide first level guidance/direction to network operation and maintenance analysts, technicians and or engineers. Performs technical analysis of complex software, hardware and transmission facility using various diagnostic tools in support of efficient network operations. Provides guidance/direction for engineering efforts and test and evaluation programs. Performs on site engineering when required.	Will generally have at least eight years experience in a 24x7 Computer Operations organization, maintenance and sustained engineering of LAN to WAN internetworking, including at least four (4) years in a Computer Operations Supervisory Capacity. Additional experience in other information technology areas helpful but not required. Excellent communications, customer service, and staff management skills are required. Requires the equivalent of a B.S.E.E.
	System Network engineer	Designs, installs, maintains, manages and coordinates the network. Monitors and controls the performance and status of the network resources. Utilizes software and hardware tools, identifies and diagnoses complex problems and factors affecting network performance. Maintains technical currency and studies vendor products to determine those that best meet client needs.	Will generally have a Master's degree plus 3 year experience, a Bachelor's degree plus 5 years experience, certification plus 7 years experience or a high school diploma plus 10 years experience. Degree and/or certification must be in computer science, information systems, engineering, or other related scientific or technical discipline.
	Security Engineer	Analyzes and defines information security, automated information security (AIS), and/or computer security requirements. Designs and/or approves the final security design and integrates the total solution to include hardware/software/communications (either Client/Server or Web based). Possesses additional expertise in the areas of telecommunication vulnerabilities and intrusion detection. Organizes technical information about an organization's mission, goals, and needs; existing security products; and ongoing programs. Develops, analyzes, and implements security architecture(s) as appropriate. Performs risk analysis and security audit services, develops analytical reports as required. Perform in one or more of the following areas: AIS risk assessment methods and procedures; security of system software generation; security of computer hardware; operating system utility/support software. May be responsible for leading a team in performing these services.	Demonstrated ability to complete security related projects. The Security Engineer assigned will generally have a Bachelors Degree, or an Associates Degree in related field and three years of progressive IT experience. Must have the ability to work in team environment with the customers engineers or administrators to integrate security engineering principles and practices into the customers engineering and development processes. Must have demonstrated experience designing or implemting filtering policies, access control lists, virtual private network solutions, secure access, strong authentication, and other security mechanisms.
	Security Analyst	Responsibilities include the installation, operation, and management of approved security devices to provide a variety of security services. Performs various assignments including documentation analysis, standards interpretation, system testing, and certification. Leads efforts to analyze and define security requirements for a variety of computer issues. Designs, develops and implements solutions to requirements. Gathers and organizes technical information pertaining to an agencies mission objectives and goals; existing and new security products; and ongoing programs. Performs risk and benefits analyses for recommended solutions. Develops, analyzes and implements security architecture(s) as required. Ensures that prototype and pilot services are safe from security threats.	Will generally have 2 - 6 years experience supporting security analysis and implementation and a Bachelor's degree in Computer Science, related degree or equivalent work experience. Ability to apply defined security analysis methodologies to government or commercial networks or systems. Ability to develop customer security requirements, functional requirements, mission, operations, architecture, and policies and then analyze for security flaws. Ability to identify counterme asure options and support customers in choosing the best solution to satisfy budget, functional, security, and other critical requirements. Working knowledge of widely accepted security evaluation criteria.